

# SUSTAINABILITY





# OUR PHILOSOPHY



We act today, because we think about tomorrow.

While crafting products of enduring beauty and utility, in the heart of every great company lies a promise to Mother Earth.

From the moment raw materials are sourced to the firing of our creations, every process is filled with reverence for the planet.

We implemented transformative processes that stand as a testament to our vision and we're always looking for new measures that allow decarbonization and increase energy efficiency.

In our pursuit of a more harmonious relationship with our planet, we've embarked on an inspiring journey of sustainability.

Picture this: a majestic rainwater capture system dances in harmony with the rhythm of nature, while solar panels stand tall, soaking in the sun's radiant energy to power our endeavors and amidst our production processes, a gentle vacuum system whispers, ensuring that no harmful particles disturb the tranquility.

But our commitment to Mother Earth doesn't end there. We've delved deeper, integrating ingenious heat recovery systems and innovative water treatment processes.

Every droplet utilized in our production is cherished, treated, and lovingly reused, reflecting our dedication to responsible stewardship.

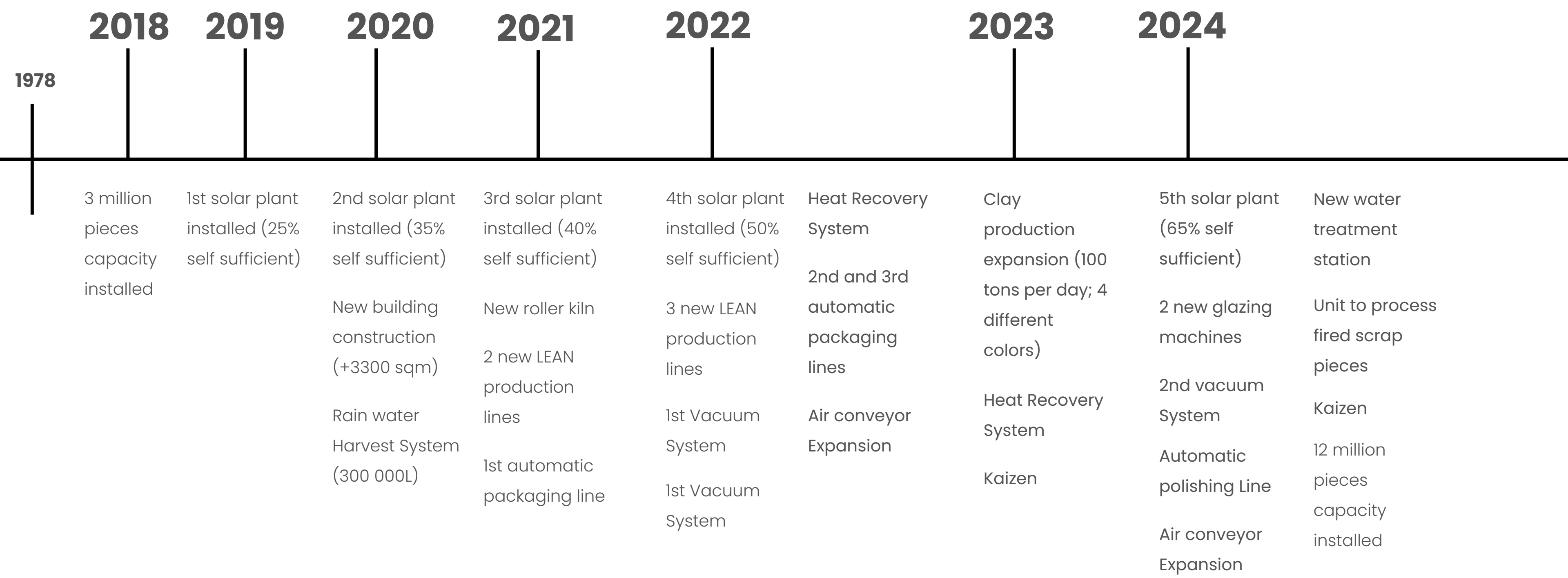
Looking ahead, the horizon brims with promises of further sustainability endeavors. We envision harnessing the warmth from our air compressors, electrifying our firing process, and gracefully transitioning to renewable energy sources for drying.

Together, we're not merely building a future, we're crafting an opulent tapestry of sustainability, weaving threads of hope and vitality.

We invite you to join us as we build a brighter, greener future for generations to come.

**ÁGUEDA  
RECICLA+**  
Empresa Certificada

# OUR JOURNEY



# RAIN WATER CAPTION SYSTEM

300 000 litres capacity | Self Sufficient for 18 days without rain





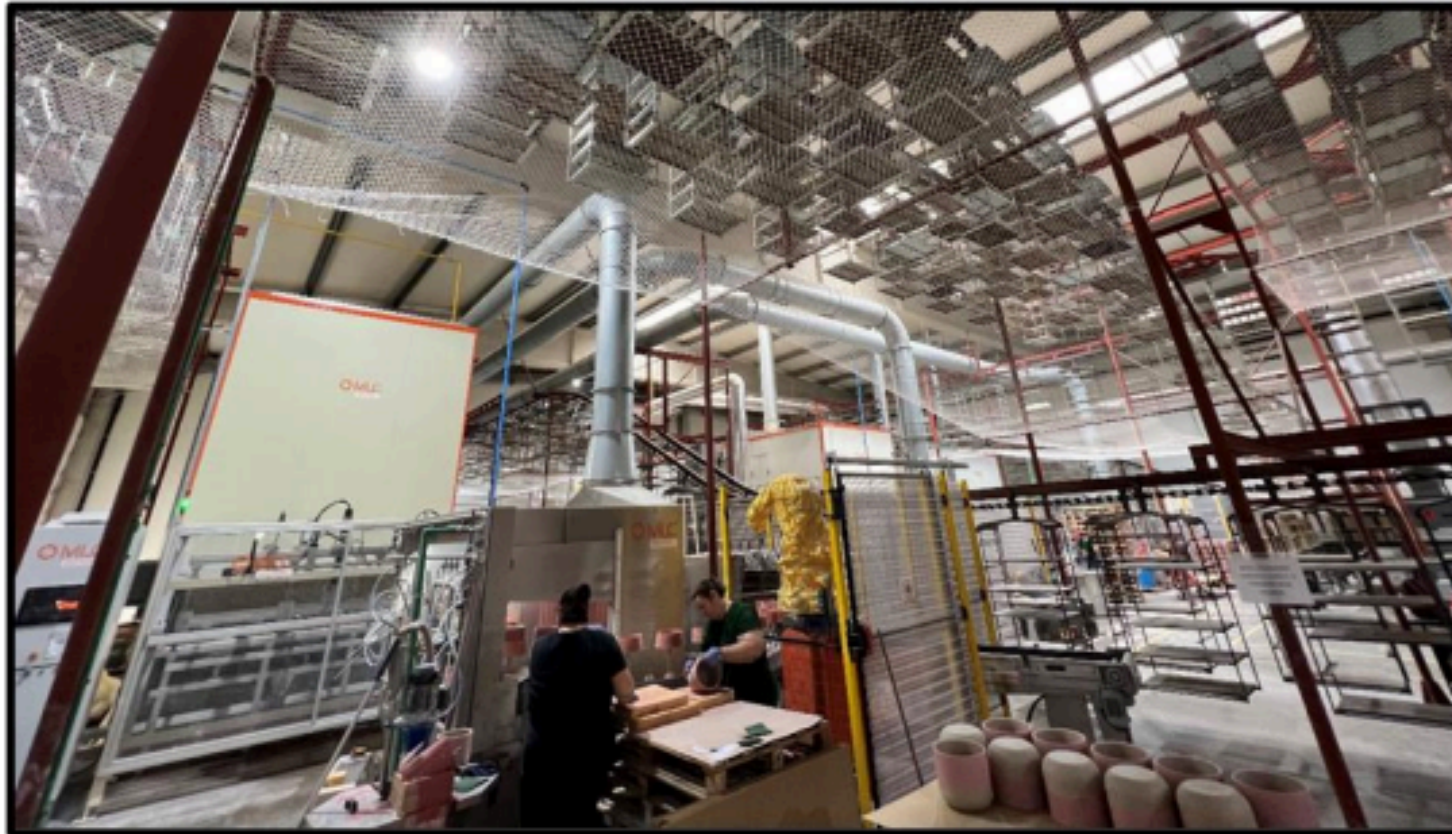
# SOLAR PANNELS + GREEN ELECTRICITY FROM THE GRID



**1st Phase: 640 pannels of 390Wp 2nd**  
**2nd Phase: 482 pannels of 410Wp**  
**3th Phase: 483 pannels of 415 Wp**  
**4th Phase: 784 pannels of 475 Wp**



# VACCUM SYSTEM FOR SOLID GLAZING PARTICLES

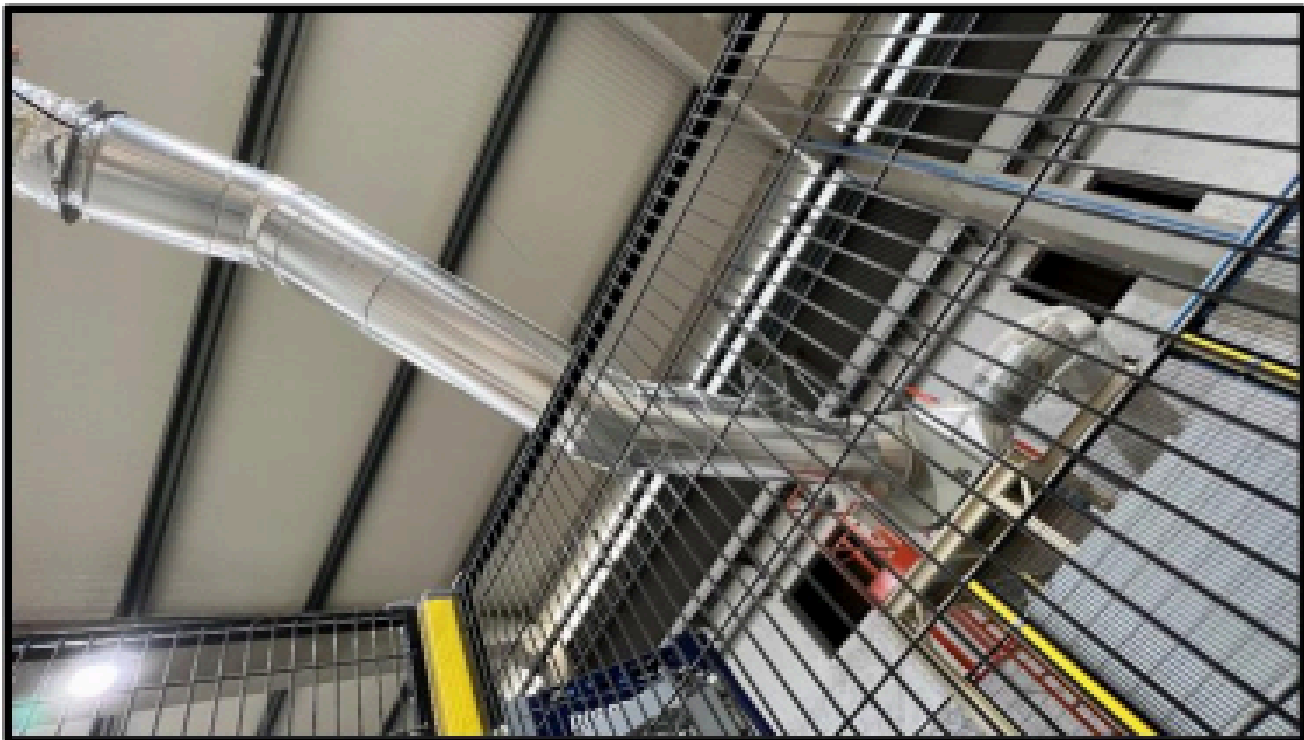
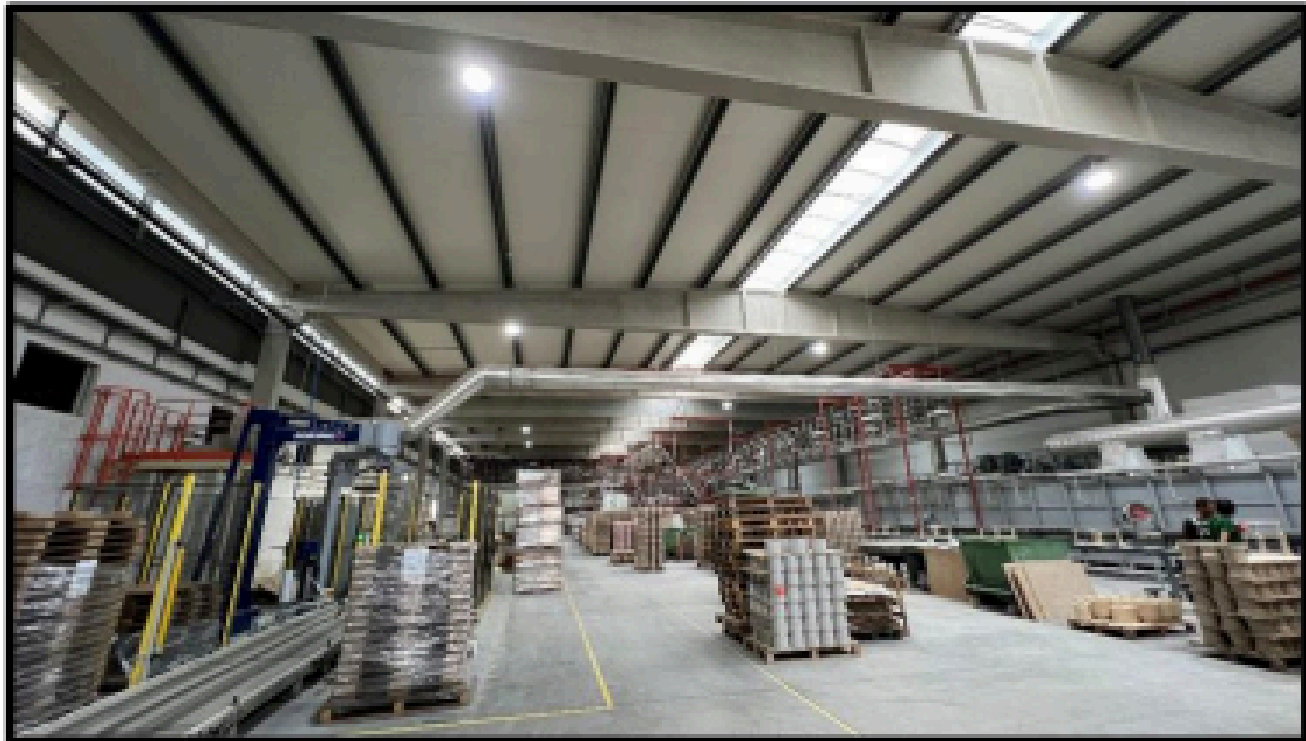


**The system avoids releasing these particles into the air.**

**Instead, they are collected into big bags and reused in the glazing process again.**

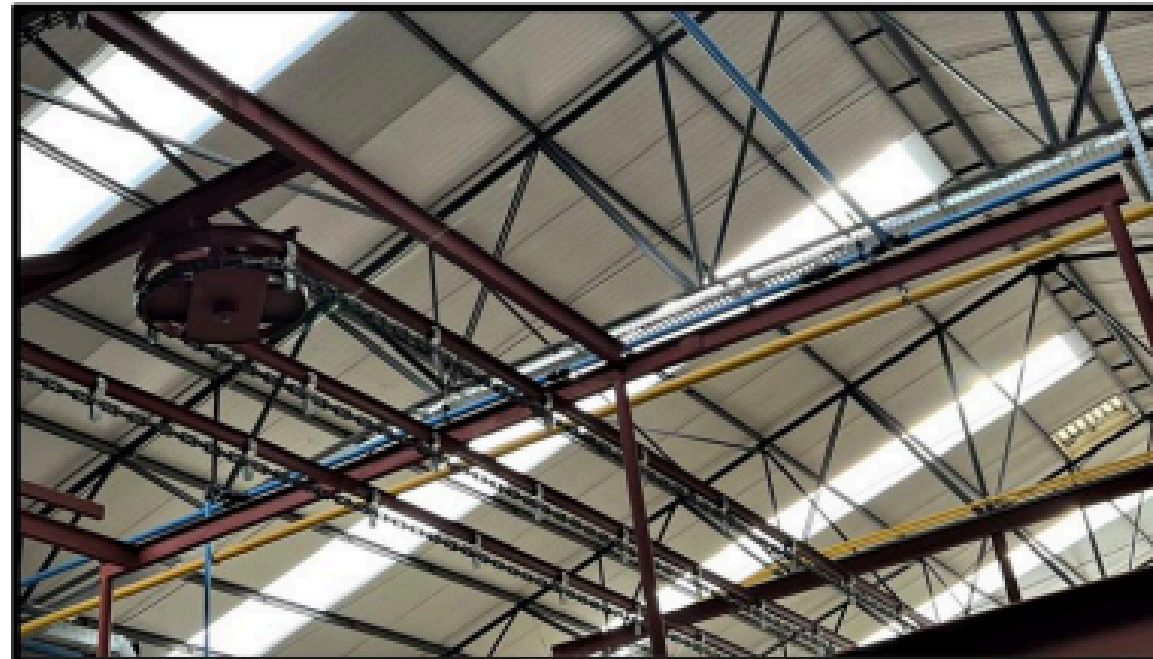
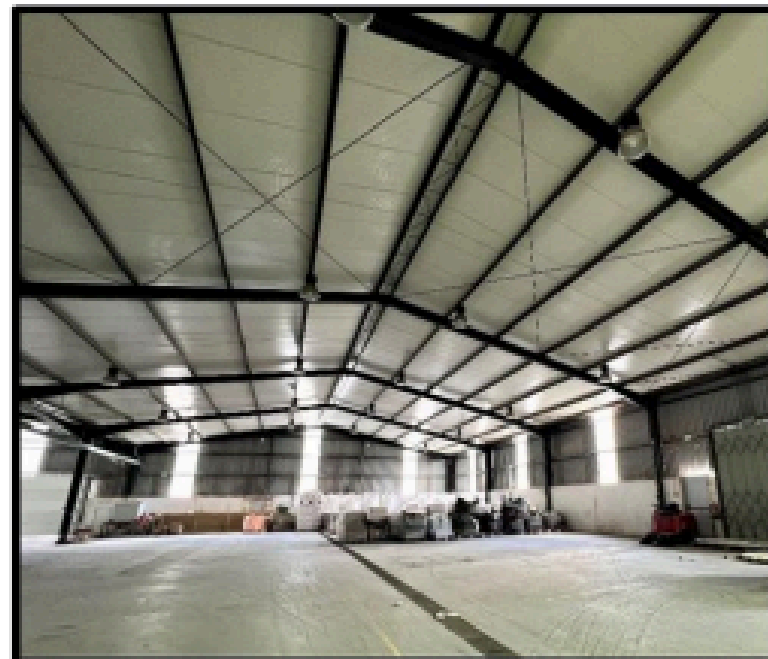


# HEAT RECOVERING SYSTEM FROM KILN TO DRYER





# NATURAL LIGHT



**Creating a better working environment and reducing electricity consumption.**



# WATER TREATMENT



**All water used in our Production is treated in our premises being reused afterwards.**



# RAW MATERIAL SAVINGS



- **vacuum pug mill implanted in machines**  
(approximately 3.5kg of reused clay per day)
- **The dry clay and shavings that come out of the machines, which do not yet have a vacuum pug mill, are reintroduced into the production process.**





# GLAZE REUSE



In the new production unit glazing machines have a suction system that allows the glaze to be reused. Vacuum system collect the glaze, dry it and transform it into powder, which is later reinserted into the production process.



# WASTE SEPARATION



We separate the waste produced in our factory and send it to a team that manages it.



# **FUTURE NET ZERO EMISSIONS PROJECTS**



## **HEAT RECOVERY FROM AIR COMPRESSORS – MAY 2024**

Up to 100% of the electrical energy used by an industrial air compressor, is converted into heat, and 96% of that energy is available for recovery, the potential savings are enormous. The heat will be used into two ceramic glazing dryers – MLC.

## **220 Kw Solar Plant over Car Park – SEPTEMBER 2024**

Electricity generated will be used directly or stored in the batteries to be installed in 2025.

## **ELETRIFICATION – NOVEMBER 2024**

Regarding the natural gas consumption, on the 3 MLC dryer's we intend to electrify this process to heat the air till 80°C.

## **ENERGY MANAGEMENT SYSTEM – EMS – DECEMBER 2024**

## **ENERGY STORAGE – JULY 2025**

## **1,8 Mw SOLAR PLANT – OCTOBER 2025**

On 20 000 sqm owned land.



# UPCOMING EXPLORATION



2025

- Heat Pump System + 4MW storage battery
- EMS – Energy Management System
- Automatic Slip Casting
- Automation on extruders

2026

- 6th solar plant (80% self sufficient)
- Construction of a new building (+4500 sqm)

2027

- Automatic Storage Warehouse
- Big Size Pots – LEAN production lines
- Hydrogen production (to replace up to 50% of natural gas used)



# TAKE A LOOK

AT THE FOREFRONT OF SUSTAINABILITY





# CERTIFICATES

EMPRESA CERTIFICADA  
2024



NÍVEL III

Certifica-se que, no âmbito do projeto Águeda Recicla+, a Empresa  
***Cerâmica Borralheira S.A.***  
reuniu os requisitos de sustentabilidade e de boas práticas para a  
reciclagem que permitem conferir a sua certificação neste nível.





# THANK YOU

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## DOWNLOAD OUR CATALOGUE

**Borrallheira 2024**